ABSTRACT OF THE DISCLOSURE

Entry of HIV-1 into target cells requires cell surface CD4 as well as additional host cell cofactors. A cofactor required for infection with virus adapted for growth in transformed T cell lines was recently identified and named fusin. Fusin, however, does not promote entry of macrophage-tropic viruses that are believed to be the key pathogenic strains in vivo. It has now been determined that the principal cofactor for entry mediated by the envelope glycoproteins of primary macrophage-tropic strains of HIV-1 is CC-CKR5, a receptor for the β-chemokines RANTES, MIP-1α, and MIP-1β.